

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 1 006 066 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
02.05.2001 Bulletin 2001/18

(51) Int. Cl.<sup>7</sup>: B65H 19/22, B65H 19/30

(43) Date of publication A2:  
07.06.2000 Bulletin 2000/23

(21) Application number: 99122791.9

(22) Date of filing: 16.11.1999

(84) Designated Contracting States:  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE

Designated Extension States:

AL LT LV MK RO SI

(30) Priority: 03.12.1998 US 204906

(71) Applicant:  
Paper Converting Machine Company  
Green Bay, Wisconsin 54307-9005 (US)

(72) Inventors:  
• Blume, Joseph A.  
Green Bay, Wisconsin 54313 (US)

• Hertel, James E.  
Green Bay, Wisconsin 54311 (US)  
• Vigneau, Richard J.  
Green Bay, Wisconsin 54313 (US)  
• Daul, Thomas J.  
Oneida, Wisconsin 54155 (US)

(74) Representative:  
Ruschke, Hans Edvard, Dipl.-Ing. et al  
Ruschke Hartmann Becker  
Pienzenauerstrasse 2  
81679 München (DE)

### (54) Surface winder with pinch cutoff

(57) A surface winder includes first (20) and second (22) winding rolls for winding a web on a center member, a stationary surface (27) spaced from the first winding roll for rolling a center member on the stationary surface, and a pinch pad (24) for pinching the web against a pinch surface upstream of the center member (c) and thereby severing the web. The first winding roll is provided with a high friction surface, and only a short length of web needs to be stretched between the pinch surface (25) and the first roll to tension and sever the web. The severed web is wound on the center member (c) as the center member rolls on the stationary surface.



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number

EP 99 12 2791

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	EP 0 498 052 A (PAPER CONVERTING MACHINE CO) 12 August 1992 (1992-08-12) * the whole document *	1,19	B65H19/22 B65H19/30
A	EP 0 694 020 A (PERINI FABIO SPA) 31 January 1996 (1996-01-31) * column 7, line 38 - column 8, line 36 *	1,19	
A,D	US 5 137 225 A (BIAGIOTTI GUGLIELMO) 11 August 1992 (1992-08-11) * abstract; figures *	1,19	
A	WO 98 12134 A (C G BRETTING MANUFACTURING COM) 26 March 1998 (1998-03-26) * abstract; figures *		
A	WO 94 21545 A (PERINI EVA ;PERINI FABIO SPA (IT)) 29 September 1994 (1994-09-29) * page 9, line 28 - page 10, line 10; figures 1-8 *	27	
A	US 5 603 467 A (BIAGIOTTI GUGLIELMO ET AL) 18 February 1997 (1997-02-18) * column 4, line 56 - column 5, line 17; figures *	27	TECHNICAL FIELDS SEARCHED (Int.Cl.7) B65H
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	9 February 2001	Haaken, W	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background C : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons B : member of the same patent family, corresponding document			



European Patent  
Office

Application Number

EP 99 12 2791

### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
  
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
  
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
  
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
  
  
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



European Patent  
Office

**LACK OF UNITY OF INVENTION**  
**SHEET B**

Application Number  
EP 99 12 2791

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

**1. Claims: 1-26**

**Surface winder with web pinching surface and movable pinch arm and method thereof**

**2. Claims: 27-31**

**Core delivery apparatus**

ANNEX THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 99 12 2791

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

09-02-2001

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0498052	A	12-08-1992		US 5104055 A		14-04-1992
				AT 126778 T		15-09-1995
				AU 634430 B		18-02-1993
				AU 8798591 A		13-08-1992
				BR 9105165 A		29-09-1992
				CA 2056025 A		06-08-1992
				DE 69112371 D		28-09-1995
				DE 69112371 T		01-02-1996
				JP 4303355 A		27-10-1992
				MX 9200500 A		01-08-1992
				ZA 9109353 A		19-05-1994
EP 0694020	A	31-01-1996		IT 1262046 B		18-06-1996
				AU 6512594 A		11-10-1994
				BR 9406100 A		19-12-1995
				DE 69404142 D		14-08-1997
				DE 69404142 T		19-02-1998
				FI 954449 A		11-10-1995
				GR 3024079 T		31-10-1997
				JP 2948908 B		13-09-1999
				JP 8507997 T		27-08-1996
				KR 202226 B		15-06-1999
				PL 310797 A		08-01-1996
				US 5979818 A		09-11-1999
				AT 155111 T		15-07-1997
				CA 2158751 A		29-09-1994
				CN 1119848 A,B		03-04-1996
				ES 2105683 T		16-10-1997
				IL 108955 A		12-09-1996
				WO 9421545 A		29-09-1994
				RU 2118936 C		20-09-1998
US 5137225	A	11-08-1992		IT 1233708 B		14-04-1992
				AT 119130 T		15-03-1995
				BR 9003302 A		27-08-1991
				CA 2020723 A,C		12-01-1991
				DE 69017291 D		06-04-1995
				DE 69017291 T		10-08-1995
				EP 0408526 A		16-01-1991
				ES 2069056 T		01-05-1995
				GR 3015252 T		30-06-1995
				IL 94904 A		08-07-1993
				JP 2928598 B		03-08-1999
				JP 3046952 A		28-02-1991
				KR 9311434 B		08-12-1993

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 99 12 2791

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

09-02-2001

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9812134	A	26-03-1998	US	5772149 A	30-06-1998
			AU	4647997 A	14-04-1998
			EP	0935577 A	18-08-1999
			US	6000657 A	14-12-1999
WO 9421545	A	29-09-1994	IT	1262046 B	18-06-1996
			AT	155111 T	15-07-1997
			AU	6512594 A	11-10-1994
			BR	9406100 A	19-12-1995
			CA	2158751 A	29-09-1994
			CN	1119848 A,B	03-04-1996
			DE	69404142 D	14-08-1997
			DE	69404142 T	19-02-1998
			EP	0694020 A	31-01-1996
			ES	2105683 T	16-10-1997
			FI	954449 A	11-10-1995
			GR	3024079 T	31-10-1997
			IL	108955 A	12-09-1996
			JP	2948908 B	13-09-1999
			JP	8507997 T	27-08-1996
			KR	202226 B	15-06-1999
			PL	310797 A	08-01-1996
			RU	2118936 C	20-09-1998
			US	5979818 A	09-11-1999
US 5603467	A	18-02-1997	IT	1265867 B	12-12-1996
			AU	6981194 A	03-01-1995
			BR	9406768 A	21-02-1996
			DE	69407820 D	12-02-1998
			DE	69407820 T	03-09-1998
			EP	0738231 A	23-10-1996
			FI	955835 A	29-01-1996
			GR	3026093 T	29-05-1998
			JP	9501385 T	10-02-1997
			KR	202227 B	15-06-1999
			PL	311960 A	18-03-1996
			AT	161796 T	15-01-1998
			CA	2164870 A	22-12-1994
			CN	1124947 A,B	19-06-1996
			ES	2111308 T	01-03-1998
			IL	109718 A	10-06-1997
			WO	9429205 A	22-12-1994
			RU	2120399 C	20-10-1998